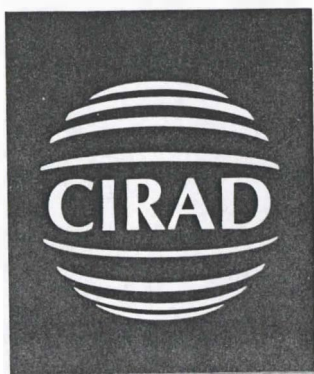


# Department of Forestry Lao PDR

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Centre  
de coopération  
internationale  
en recherche  
agronomique  
pour le  
développement

## ENVIRONMENTAL SPECIALIST'S 9th TRIP REPORT 23 February - 7 March 1998

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**CIRAD-Forêt - MIDAS - Burapha**

Lao ADB Plantation Forestry Project - Loan No, 1295 (SF)

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March 1998

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**Trip Report**  
**23 February to 7 March 1998**

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- Appendix 1: Environmental Monitoring Specialist's Terms of Reference  
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## **List of Abbreviations and Acronyms**

### **List of Abbreviations and Glossary**

ADB	Asian Development Bank
APB	Agriculture Promotion Bank
BME	benchmark monitoring and evaluation
DAFO	District Agriculture and Forestry Office
DOF	Department of Forestry
EBS	environmental baseline survey
EMR	environmental monitoring report
EMS	environmental monitoring system
GOL	Government of Lao PDR
MES	Monitoring and Evaluation Section (of PCU)
PAFO	Provincial Agriculture and Forestry Office
PBP	pilot block plantation
PCU	Project Coordination Unit
PFP	pilot farmer plantation
PPCU	Provincial Project Coordination Unit
STP	socio-technical profile

## **1. Introduction**

Trip Report Number 9 covers the visit of the Environmental Monitoring Specialist to the Project during the period 23 February to 7 March 1997. The objectives of this visit included completing the Environmental Baseline Survey Report (EBS Report 2) for tree plantations established by the Project during 1997 and the Environmental Monitoring Report (EMR 2) for tree plantations established by the Project in 1995, 1996, and 1997. A detailed itinerary and list of tasks is presented in **Appendix 2**.

## **2. Environmental Monitoring Activities Undertaken**

### **2.1 Field Trips**

Two field trips were made to plantation sites during this visit to confirm environmental data collected by PPCU personnel on both the EBS forms for the PBPs established by the Project in 1997, and the EMR forms for PBPs established during 1995, 1996, and 1997.

### **2.2 Environmental Survey and Monitoring Forms**

In the course of preparing the Environmental Baseline Survey Report for pilot block plantations established in 1997 (EBS Report 2), a new reporting format was developed. This report format (see **EBS Report 2**) will facilitate the recording, analysis, and reporting of important environmental data collected from proposed tree plantation sites prior to establishment of plantations. In place of a long, qualitative, and highly analytical report (EBS Report 1), the new reporting format will be more quantitative in content, with important issues highlighted at the end of each section. This changed format was discussed with and is preferred by the Chief of the Monitoring and Evaluation Section of the PCU. The changed format is being introduced in anticipation of PCU/MES having to prepare subsequent EBS reports.

## **3. Environmental Monitoring Activities Planned**

The following environmental monitoring activities are planned for the next visit to the Project tentatively planned for August 1998:

- visits to Salavan and Champassack provinces to assess environmental conditions for plantation forestry;
- follow up visits to PBP sites in Vientiane Province, Vientiane Municipality, Bolikhamxai, and Savannakhet provinces to observe environmental impacts of the tree plantations and make recommendations for mitigation measures; and,
- supplementary training for PPCU personnel in Salavan and Champassack provinces.

## 4. Environmental Reporting

### 4.1 Environmental Monitoring Specialist's Reports

During this visit, the Specialist prepared two reports, namely:

- *Environmental Baseline Survey Report* for 1997 PBPs; and,
- *Environmental Monitoring Report No. 2* for 1997 - 1998

All environmental component technical reports scheduled for preparation in 1998 have now been completed.

#### Environmental Component Technical Reports for 1998

Report	Period of Preparation	Tentative Date for Submission of Draft Final Report	Tentative Date of Submission of Final Report	Remarks
<i>Environmental Baseline Survey Report</i> for 1997 PBPs	February/March 1998	March 1998	March 1998	Completed in March 1998
<i>Environmental Monitoring Report No. 2</i> for 1997 - 1998	February/March 1998	March 1998	March 1998	Completed in March 1998

### 4.2 Summary of Findings

#### 4.2.1 *Environmental Baseline Survey Report* for 1997 PBPs

The *Environmental Baseline Survey Report* for the PBPs established in 1997 revealed that all sites were suitable for tree plantations. The following points should be brought to the attention of the PCU/MES:

- At the second PBP site in Ban Songkhonmai, Bolikhamxai province, nearly all trees with a diameter greater than 15 centimeters had been removed from the site, along with nearly all natural vegetation. Approximately 20 indigenous tree species remained on site. All trees of economic value had been removed and trees with a diameter of up to 35 centimeters were observed along the perimeter of the plantation site.
- At Ban Phonsi, Bolikhamxai province, a villager had begun to remove the protection strip retained along both sides of a seasonal stream located along the northern perimeter of the plantation site. This may be an indication that the villager had previously cropped upland rice on the PBP site and was now unable to do so. The PCU/MES should investigate this matter to determine the cause of the encroachment and formulate a mitigation measure.



#### 4.2.2 Environmental Monitoring Report No. 2 for 1997 - 1998

The EMR 2 revealed that the tree plantations established in 1995, 1996, and 1997 were having no significant impacts on the environment or socio-economics of neighboring villages. Land use surrounding the tree plantations for the most part remained the same. The road constructed by the Project likely served as an incentive for accelerated land clearing in Ban Nakha, Vientiane Municipality, although this is a normal process of economic development and is expected to have minimal impact on the community, if any.

The quality of environmental data being reported continues to be a concern of the Environmental Monitoring Specialist and has been brought to the attention of the Chief of the PCU/MES. The MES should take responsibility for i) ensuring that both EBS and EMR forms have been completed in full and that data is clear and easily processed for analysis; ii) environmental data presented on the EBS and EMR forms are screened and re-checked prior to being given to the Specialist for analysis; and, iii) that PPCU are aware of the importance of good reporting of environmental data.

The Compliance Report for Ban Nonsavang, Savannakhet Province, attached to the EMR 2 will be completed by the PCU/MES.

## 5. Training

### 5.1 Training of Dong Dok Forestry School Students

In the course of the field trips to Ban Phontong, Vientiane Province, and Ban Nakha, Vientiane Municipality, the Environmental Monitoring Specialist undertook training of three student/trainees from the Dong Dok Forestry School, in environmental aspects of plantation establishment and management.

### 5.2 Summary of Training Activities

The matrix below summarizes environmental training provided by the Environmental Training Specialist to Project and other DOF staff during 1997 and 1998 (to date).

Training Topic	Participants (DOF Unit & No.)	Schedule & Location	Remarks & Status
Environmental Baseline Surveys	PPCU, 30	May 1997; 4 provinces	Refresher training in use of EBS forms; in- troductory training for new PPCU personnel. <b>COMPLETED</b>
Environmental Data Analysis	PCU/MES, 6	May 1997; PCU in Vientiane	<b>COMPLETED</b>
Environmental Monitoring	PPCU, 30	May 1997; 4 provinces	<b>Completed</b> for 3 provinces. PCU/MES trained Vientiane Municipality PPCU.

Training Topic	Participants (DOF Unit & No.)	Schedule & Location	Remarks & Status
Environmental Reporting	PCU/MES, 6		Training for PCU/MES on extraction, analysis, & reporting of data from EMR form. <b>COMPLETED</b>
Mitigation Measures	PCU/MES	July 1997; PCU, Vientiane	Introductory remarks <b>COMPLETED</b>
Use of Training Handbook for Environmental Monitoring of Forest Tree Plantations in Lao PDR	PCU/MES, 6	December 1997, PCU/MES, Vientiane	<b>COMPLETED</b>
Training of Dong Dok Forestry School Students in environmental aspects of plantation establishment and management.	Student Trainees, 3	March 1998, Ban Phontong, Vientiane Province and Ban Nakha, Vientiane Municipality	<b>COMPLETED</b>

## 6. 1998 Schedule for the Environmental Monitoring Specialist

The following schedule is proposed for visits of the Environmental Monitoring Specialist during 1998:

Dates	Person-Months	Tasks	Outputs	Remarks
23 February - 7 March 1998	0.50	<ul style="list-style-type: none"> <li>Environmental Baseline Survey Report for 1997 PBPs</li> <li>Environmental Monitoring Report No. 2 for 1997 - 1998</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Baseline Survey Report for 1997 PBPs</li> <li>Environmental Monitoring Report No. 2 for 1997 - 1998</li> <li>Trip Report No.9</li> </ul>	<b>COMPLETED</b>
Tentatively 3-15 August 1998	0.50	<ul style="list-style-type: none"> <li>Preliminary environmental assessment of Saravan and Champassack provinces for tree plantations</li> <li>Environmental training for PPCU in Saravan and Champassack provinces</li> </ul>	<ul style="list-style-type: none"> <li>Training of 6-10 PPCU in environmental aspects of establishment of tree plantations in Saravan and Champassack provinces</li> </ul>	
<b>Total</b>	<b>1.00</b>			



## **7. Conclusions and Recommendations**

### **7.1 Conclusions**

1. Environmental baseline surveys and environmental monitoring reports prepared by PPCU personnel in Vientiane Municipality, Vientiane Province, Bolikhamxai Province, and Savannakhet Province, indicate that the Project's tree plantations are having no significant impacts on the environment of neighboring communities.
2. The quality of environmental data collected on the EBS and EMR forms continues to be of concern to the Environmental Monitoring Specialist. The quality of environmental data can be graded as follows:
  - Bolikhamxai = good
  - Savannakhet = satisfactory
  - Vientiane Prefecture = satisfactory
  - Vientiane Province = below average
3. Land clearing operations require more intensive supervision. Clumps of natural vegetation, economically important trees, and trees with a diameter greater than 15 centimeters should be retained on the tree plantation site during land clearing.
4. Protection strips retained along streams and drainage channels at plantation sites in at one location have been cleared to utilize land for crop production.

### **7.2 Recommendations**

1. The Chief of the PCU/MES is aware of data quality problems and has agreed that more effort is required on the part of the MES to ensure the credibility of the environmental data being reported.
2. More intensive supervision of land clearing is required by the PPCU at tree plantation sites.
3. Monitoring of the quality and integrity of protection strips along streams, drainage channels, and other water bodies, as well as of buffer zones between plantations and protected areas (conservation forests) should be added to the list of items monitored by PPCU during periodic visits to plantation sites.

## **List of Appendices**

- Appendix 1: Environmental Monitoring Specialist's Terms of Reference**
- Appendix 2: Itinerary: 24 November - 6 December 1997**

## **Appendix 1: Terms of Reference**

## **Terms of Reference for the Environmental Monitoring Specialist**

(from the Project Administration Memorandum  
dated May 1994)

1. Review the environmental aspects of the Project area and carry out a baseline environmental survey. Prepare a comprehensive baseline survey report.
2. Prepare guidelines for environmental protection in industrial tree plantations.
3. Assist the PCU to include environmental aspects in the training program for staff and the Community Organizers, and in the extension service to the farmers.
4. Strengthen awareness among the Project staff and Community Organizers of the importance of environmental protection in effective implementation of the Project
5. Prepare a detailed program and reporting format for the monitoring and evaluation of environmental impacts of tree plantations.
6. Assist the PCU and PPCUs coordinate activities with NGOs, village committees, and other organizations to achieve the necessary level of community involvement in environmental protection.

**Appendix 2: Itinerary**  
**(Work Plan)**  
**23 February - 7 March 1998**

**Proposed Work Plan for the Environmental Monitoring Specialist  
for the Period 23 February - 7 March 1998**

Following discussions with Mr. Thomas Brummer, Team Leader, and Dr. Phet Phomphiphak, the chief of the MES, the following work plan and schedule of field trips to project sites during the period 23 February - 7 March 1998 is proposed:

23 February 1998

Morning: Travel from Bangkok to Vientiane  
Afternoon: Meetings with Team Leader and MES Staff to discuss work plan  
Begin review and analysis of EBS data from 1997 PBP sites

24 February 1998

Meetings with Team Leader and Chief of MES to discuss proposed work plan.  
Continue review and analysis of EBS data from 1997 PBP sites

25 February 1998

Morning: Preparation of Work Plan for 23 February - 7 March 1998 visit.  
Preparation of EBS Report on 1997 PBP sites.  
Afternoon: Continue preparation of EBS Report on 1997 PBP sites.

26 February 1998

Complete preparation of Draft EBS Report on 1997 PBP sites.

27 February 1998

Field trip to Ban Phontong, Vientiane Province to confirm findings of EMR.

28 February 1998

Begin preparation of Environmental Monitoring Report No. 2 for 1997-1998.

2 March 1998

Preparation of Environmental Monitoring Report No. 2 for 1997-1998.

3 March 1998

Morning: Preparation of Environmental Monitoring Report No. 2 for 1997-1998.  
Afternoon: Meeting with Mr. Bouahong Phantanousy and World Bank Mission to discuss applicability of Lao-ADB Plantation Forestry Project's environmental monitoring system to the Wildlife and Protected Areas Conservation Project.

4 March 1998

Visit three 1997 PBP sites in Bolikhamxai Province to confirm accuracy of EBS data collected by PPCU and observe compliance of plantation establishment to the Project environmental guidelines.

5 March 1998

Complete preparation of EBS Report on 1997 PBP sites.  
Complete preparation of Draft Environmental Monitoring Report No. 2 for 1997-1998.



6 March 1998

Prepare Environmental Monitoring Specialist's 9<sup>th</sup> Trip Report  
Briefing of PCU/MES staff on findings of EBS Report on 1997 PBP sites and  
Environmental Monitoring Report No. 2 for 1997-1998.

7 March 1998

Morning: Incorporate appropriate comments and suggestions from PCU/MES  
into EBS Report on 1997 PBP sites and Environmental Monitoring Report No. 2 for  
1997-1998.

Afternoon: Travel to Bangkok.